

Appl. No.: 10/601,063

Attorney Docket No.:GP-302694

II. Remarks

Claims 1, 2, 4-14, 21 and 22 are pending in this application. Claims 1, 2, 4-6, 21 and 22 have been allowed. No claims have been amended. No claims have been cancelled. No new claims have been added.

Allowed Claims

Applicants respectfully acknowledge with gratitude the Examiner's allowance of claims 1, 2, 4-6, 21 and 22.

Claim Objections

Claims 9, 10, 13 and 14 have been objected to as being dependent upon a rejected base claim. Applicants have overcome this objection for the reasons stated below.

Claim Rejections – 35 USC §103(a)

Claims 7, 8, 11 and 12 have been rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,370,199 issued to Akuta et al. (Akuta) in view of U.S. Patent No. 5,729,455 issued to Yamashita et al. (Yamashita).

Akuta is directed to a traction control system for a vehicle having a pair of driven wheels, and a pair of non-driven wheels. The Akuta system includes driven wheel speed detecting means, non-driven wheel speed detecting means, vehicle speed determining means, slip detecting means and a wheel lift detecting means. The driven wheel speed detecting means detects the speeds of the driven wheels. The non-driven wheel speed detecting means detects the speeds of the non-driven wheels. The vehicle speed determining means determines a vehicle speed from speeds detected by the non-driven wheel speed detecting means. The slip detecting means detects a measure of the slipping of the driven wheels by comparing speeds detected by the driven wheel speed detecting means with the vehicle speed determined by the vehicle speed determining means. The wheel lift detecting means detects a substantial lifting of

Appl. No.: 10/601,063

Attorney Docket No.:GP-302694

one of the non-driven wheels from a road surface. When the wheel lift detecting means has detected a substantial lifting of one of the non-driven wheels from the road surface, the vehicle speed determining means determines that the vehicle speed is solely from the speed of the other of the non-driven wheels. (See Col. 3, lines 2-21).

However, Akuta does not teach or suggest comparing the non-driven wheel speed and a trans throttle position to a predetermined non-driven wheel speed and a predetermined trans throttle position and selecting one of a plurality of wheel slip detection methods based on this comparison, as recited in claim 7. Akuta teaches the use of two throttle valves and two throttle valve position detectors (See Col. 4, lines 29-38). Akuta further teaches that these signals are supplied to a control unit to control the output torque of an engine by actuating the second throttle valve with a pulse motor. (See Col. 4, lines 39-50).

Yamashita discloses a traction control system for a vehicle including an engine having a supercharger. The system includes a wheel speed detecting means, a slip rate calculating means, an engine output controller. The wheel speed detecting means detects the rotational speeds of the wheels of the vehicle. The slip rate calculating means calculates the rate of slip of the driving wheels on the basis of the wheel speeds detected by the wheel speed detecting means. The engine output controller which when the rate of slip of the driving wheels is larger than a predetermined value, feedback-controls the engine output by controlling at least the supercharging pressure produced by the supercharger so that the rate of slip of the driving wheels converge on a predetermined target value. Additionally, the system includes a supercharging pressure detecting means, an operating condition detecting means and a traction control termination determining means. The supercharging pressure detecting means detects a supercharging pressure produced by the supercharger. The operating condition detecting means detects the operating condition of the engine. The traction control termination determining means compares the actual supercharging pressure detected by the supercharging pressure detecting means with a target supercharging pressure set according to the operating condition of the engine when the traction control

Appl. No.: 10/601,063

Attorney Docket No.:GP-302694

by feedback control of the supercharging pressure is being effected and determines that the traction control is to be terminated when the former converges on the latter (See Col. 4, lines 39-50).

Moreover, Yamashita teaches the use of a throttle position sensor for detecting the opening of the throttle valve and an idle switch for detecting that the throttle valve is fully closed (See Col. 6 lines 52-56). However, Yamashita does not teach or suggest comparing the non-driven wheel speed and a trans throttle position to a predetermined non-driven wheel speed and a predetermined trans throttle position and selecting one of a plurality of wheel slip detection methods based on this comparison, as recited in claim 7.

Accordingly, each and every limitation of claim 7 are not disclosed, taught or suggested by Akuta or Yamashita. Therefore, a prima facie case of obviousness has not been established. Thus, the present invention, as claimed in claim 7, is patentable over Akuta and Yamashita in combination or taken separately. Accordingly, Applicants respectfully request allowance of claim 7.

With regard to claims 8 - 11, 13 and 14, these claims are ultimately dependent on claim 7 and, therefore, are allowable for at least the same reasons as given above in support of claim 7. Accordingly, Applicants respectfully request allowance of claims 8 - 11, 13 and 14.

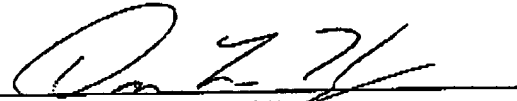
Appl. No.: 10/601,063

Attorney Docket No.:GP-302694

SUMMARY

Pending claims 1, 2, 4-14, 21 and 22 are patentable. Applicants respectfully request the Examiner grant early allowance of these claims. The Examiner is invited to contact the undersigned attorney for the Applicants via telephone if such communication would expedite this application.

Respectfully submitted,



Dan L. Thompson - Attorney
Reg. No. 54490
Telephone: 313-665-4724

DLT:cm